

**WHAT IS CLAIMED IS:**

1        1. An automatic speech recognition system, comprising:  
2            a speech recognition dictionary comprising a plurality of meaning tokens each  
3            associated with one or more pronunciations of one or more vocabulary words and  
4            signifying a single meaning; and

5            a speech recognizer configured to convert spoken input into a sequence of  
6            meaning tokens contained in the speech recognition dictionary and corresponding to  
7            a sequence of vocabulary words most likely to have been spoken by a user.

1        2. The system of claim 1, wherein each meaning token is characterized by  
2            a unique spelling.

1        3. The system of claim 2, wherein the spelling of a meaning token  
2            facilitates extraction of meaning by a language analyzer.

1        4. The system of claim 3, wherein the spelling of a meaning token  
2            encodes one or more labels identifying one or more respective application-specific  
3            categories.

1        5. The system of claim 4, wherein an application-specific category  
2            identified by a label encoded in the spelling of a meaning token is an object category,  
3            a place category, an event category, or an action category.

1        6. The system of claim 1, wherein multiple meaning tokens are associated  
2            with each of one or more polysemous vocabulary words contained in the speech  
3            recognition dictionary.

1        7. The system of claim 1, further comprising a language analyzer  
2            configured to extract meaning from the sequence of meaning tokens provided by the  
3            speech recognizer based upon a set of task-specific semantic rules.

1        8. The system of claim 7, wherein the language analyzer is a deterministic  
2            rule-based language analyzer.

1        9.    The system of claim 7, further comprising an application command  
2    translator configured to select an action from a set of application-specific actions  
3    based upon the meaning extracted by the language analyzer, and to issue one or  
4    more commands to carry out the selected action.

1        10.   The system of claim 1, wherein the speech recognition dictionary is a  
2    data structure stored in a computer-readable physical medium.

1        11.   An automatic speech recognition method, comprising:  
2            converting spoken input into a sequence of meaning tokens contained in a  
3    speech recognition dictionary and corresponding to a sequence of vocabulary words  
4    most likely to have been spoken by a user,  
5            wherein the speech recognition dictionary comprises a plurality of meaning  
6    tokens each associated with one or more pronunciations of one or more vocabulary  
7    words and signifying a single meaning.

1        12.   The method of claim 11, wherein each meaning token is characterized  
2    by a unique spelling.

1        13.   The method of claim 12, wherein the spelling of a meaning token  
2    facilitates extraction of meaning by a language analyzer.

1        14.   The method of claim 13, wherein the spelling of a meaning token  
2    encodes one or more labels identifying one or more respective application-specific  
3    categories.

1        15.   The method of claim 14, wherein an application-specific category  
2    identified by a label encoded in the spelling of a meaning token is an object category,  
3    a place category, an event category, or an action category.

1        16.   The method of claim 11, wherein multiple meaning tokens are  
2    associated with each of one or more polysemous vocabulary words contained in the  
3    speech recognition dictionary.

1        17. The method of claim 11, further comprising extracting meaning from  
2 the sequence of meaning tokens based upon a set of task-specific semantic rules.

1        18. The method of claim 17, further comprising selecting an action from a  
2 set of application-specific actions based upon the extracted meaning.

1        19. The method of claim 18, further comprising issuing one or more  
2 commands to carry out the selected action.

1        20. A computer program for automatically recognizing speech, the  
2 computer program residing on a computer-readable medium and comprising  
3 computer-readable instructions for causing a computer to:

4        convert spoken input into a sequence of meaning tokens contained in a  
5 speech recognition dictionary and corresponding to a sequence of vocabulary words  
6 most likely to have been spoken by a user,

7        wherein the speech recognition dictionary resides on the computer-readable  
8 medium and comprises a plurality of meaning tokens each associated with one or  
9 more pronunciations of one or more vocabulary words and signifying a single  
10 meaning.